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# MILITARY MANPOWER PLANNING: A RESPONSIVE APPROACH

Peter J. F. Tuckett

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# THESIS

MILITARY MANPOWER PLANNING:
A RESPONSIVE APPROACH

by

Peter J. F. Tuckett

December 1974

Thesis Advisor: J. K. Arima

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# Military Manpower Planning:

# A Responsive Approach

by

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Major, Australian Army
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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

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ABSTRACT

One of the recurring problems in military manpower planning is the balancing of the need for a lengthy period of training and development of a career force against the requirement that the force structure be capable of relatively short-term fluctuations to meet political and other requirements.

This problem is examined in terms of a hypothetical force model of six components. These components have been selected by dividing the force into junior, middle and senior groupings and then viewing each group in terms of officers and other ranks. Whilst recognizing the interdependence of segments, each has been studied separately and potential management policies and procedures are suggested for them. The policies and procedures recommended are based on the personal needs of the individuals under study and a knowledge of the theoretical and research findings in the fields of motivation and career development.

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# I. INTRODUCTION

One of the problems confronting the military manpower planner in an industrialized Western nation is the difficulty of deriving a long-term manpower goal which is pitched far enough ahead for him to plan against, yet is responsive to the needs of the Government. Experience would suggest that it takes in the order of 14 to 20 years to develop an effective middle-seniority professional serviceman, yet political decisions affecting military force levels seem to appear far more regularly, say every three to five years, and are induced by a variety of factors ranging from economic and sociological to strategic and philosophical considerations. [DPP 1974].

Whilst nonmilitary organizations face similar problems in developing long-term manpower objectives the military planner's difficulties are exacerbated by the unique nature of the service's demands which can be characterized by two special features: First, there is limited lateral entry into the military, especially at the senior officer level where it is not feasible directly to hire senior personnel from nonmilitary organizations. Thus except for a relatively few specialist positions the military must rely on an internal supply of manpower to fill its more senior appointments. Second, there is a continuing need both in peace and wartime for a young and vigorous force to be maintained. In particular, the officer corps must be kept energetic and capable of displaying the high levels of

mental and physical stamina which together with enthusiasm and adaptability are essential ingredients for a viable force. [Commander's Digest 1974] These special requirements are also noted by Janowitz [1960], who observed that true motivation in the military must go beyond the notion of dealing with a mere occupation and that rather the military profession is a way of life and not merely an occupational interlude.

General Maxwell D. Taylor [1973] expressed his feeling that: "Army life, in my view, should not be an extension of the civilian life which lies just over the fence of the military reservation, but something quite different which reflects the unique requirements of military life [p. 12]. General Taylor defines these unique requirements as flowing from a commitment to the military profession which requires special standards of behaviour.

## A. A POSSIBLE SOLUTION

In an effort to introduce some bounds to his forecasting the military planner may establish upper and lower levels beyond which he feels the Government will never require him to move except in unusual situations which will be accompanied by other exceptional circumstances, e.g., general mobilization. Once these limits are established the planner must then determine an effective method of operating within them.

### 1. A Responsive Model

One approach to solving this problem could attempt to create and maintain an efficient and effective force career nucleus supplemented

by noncareer people who serve in the military for relatively limited periods (e.g., three to six years). Figure I is a hypothetical representation of such a system built on certain assumptions. It is assumed that the force structure has been established on the ratio of a 1:2 low-level to high-level force need. The force is composed of approximately 50 percent of people under the age of 25 years, 30 percent in the age group 25 to 38, and 20 percent in the over 38 age group, with a possible upper limit of 60 years old. A Total Force concept is held to be in existence and a major rapid expansion from the low-level to the high-level bound would be accomplished in the most part through the utilization of Reserve forces. The planners would, in effect, attempt to structure the career force to approach as closely as possible the low-level bound which usually would be below the actual authorized strength permitted by the Government's policies at that time. In practice it would be expected that the authorized force strength would show fluctuations with a time span of three to five years.

Figure 2 is a hypothetical representation of how the system may operate. Desirably the force planners would be able to anticipate the authorized force level and manipulate the actual level accordingly. However, it is suggested that in practice this would not be feasible, if for no other reason than it could lay the military open to charges of usurping the Government's prerogative to determine defence posture. Thus, the system would probably be more one of the actual force level lagging somewhat behind the authorized level. To introduce the required

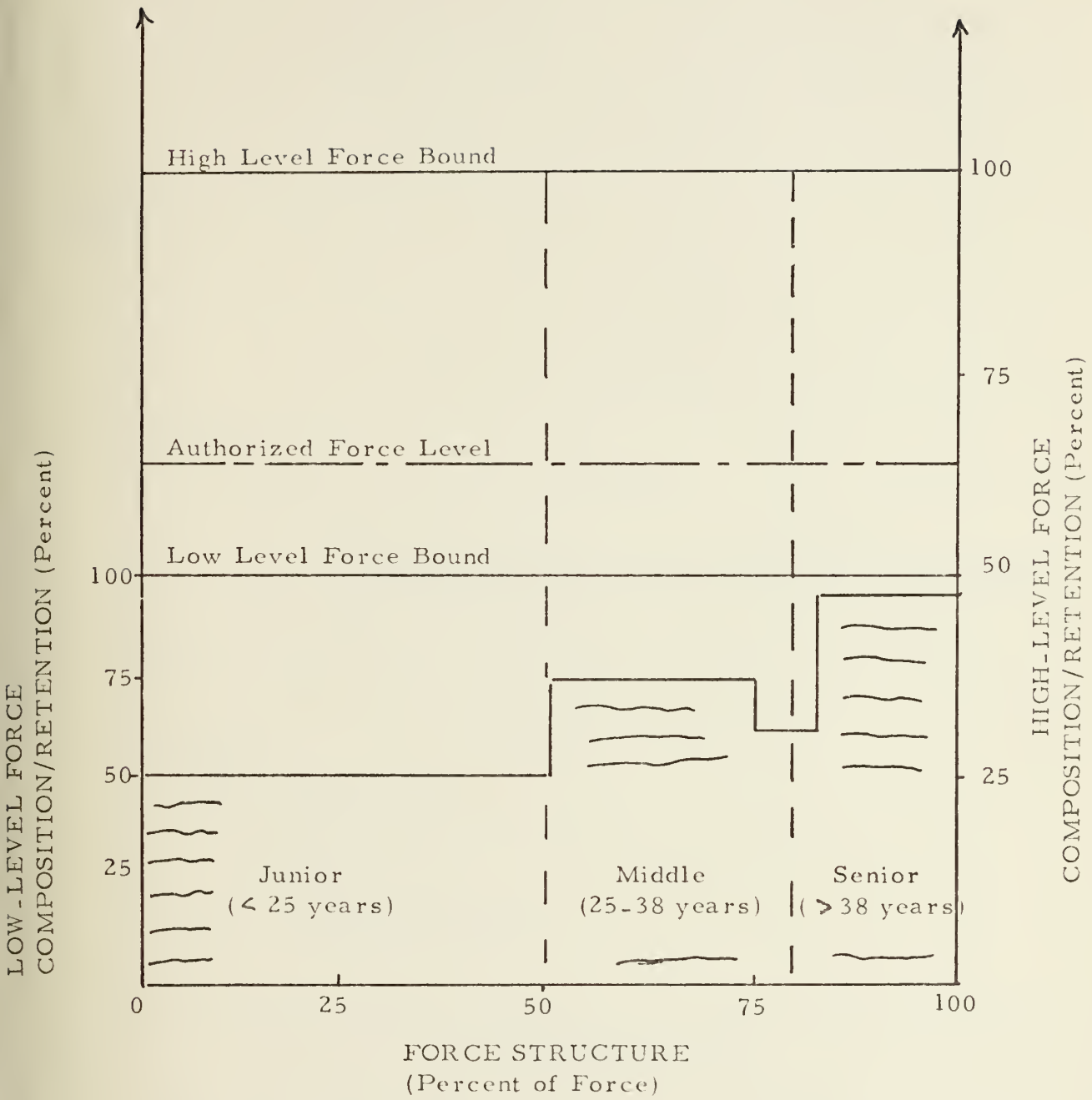


Figure 1. Composition of Force under low and high-level constraints showing proportion of career (hatched) and noncareer personnel by junior, middle and senior career groupings.

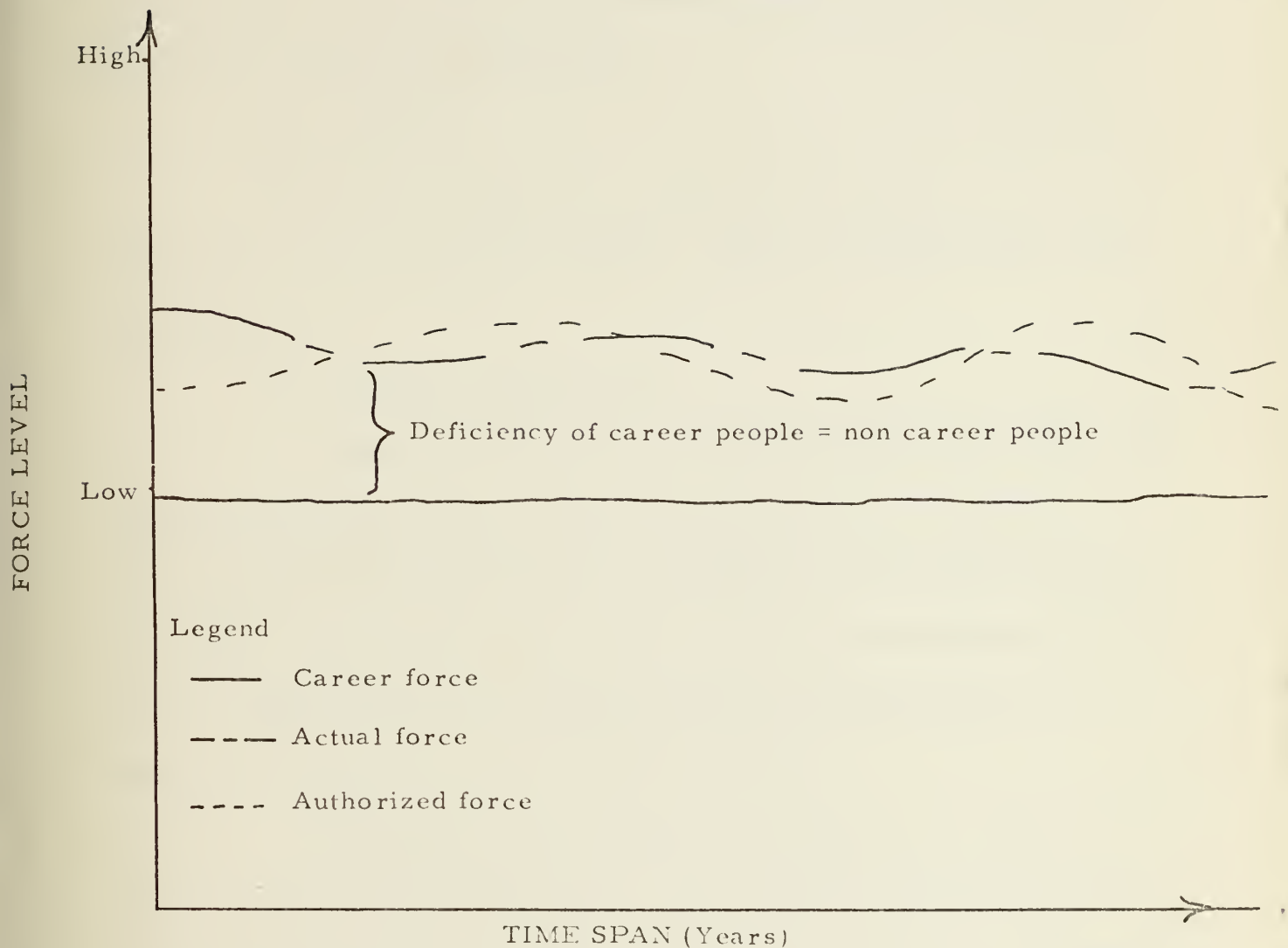


Figure 2. The system in operation illustrating the relationship of the three force levels. Note how the actual force level lags behind the authorized level and the discrepancy between the career force and the actual force level is balanced by the noncareer people.

elasticity into the manpower supply curve it is suggested this lag, together with a reasonable degree of buffer to insulate the career force from undesirable disruptions, could be managed by having in the manpower system a selected percentage of noncareer people whose prime characteristic is that they can be equitably separated or recruited into the force at reasonably short notice.

2. Key Variables

In determining what the compositions of the force should be in terms of career and noncareer people a number of related issues must be examined.

a. Strategic and Economic

Obviously the political and strategic policies in vogue will influence the planners as to the level of preparedness they should aim for. A high level of preparedness would suggest increasing the career component of the force as well as the overall force level planning boundaries. A forecast low level of preparedness would probably allow for a higher percentage of noncareer people to be used.

Economic trends and policies would also be of prime importance both because of the effects on the existing force structure (the internal manpower supply) and the labour market (the external manpower supply). Generally it would be expected that a direct relationship would exist between the need for noncareer people and the proximity of the authorized force level to the lower bound. That is, as the authorized level approaches the low-level boundary a smaller percentage of

noncareer people would be required. However, if the authorized level moves closer to the upper bound a greater need for noncareer people arises, and in times of low unemployment in the economy this may make it difficult to obtain the required short-term manpower supply. It has also been observed [Parnes, 1954] that an inverse relationship exists between separation and unemployment rates. This implies that as the external labour supply increases the internal labour supply will also increase because of a reduction in voluntary separation rates. This could mean that people originally perceived as noncareer will attempt to remain in the force at a time when they are not required.

b. Technological Forecasts

Forecasts of the weapon systems technology and their utilization in the force are also important. An understanding of the possible technological advances is essential to estimating the possible ratio of specialists to generalists. In many ways a high input of sophisticated weapons systems would suggest a higher proportion of noncareer people could be accepted in the junior and middle ranks as the skills needed to operate this type of equipment may be more clearly compatible with civilian industry requirements. Fiscal constraints may influence considerations in this area as stringent budget policies can encourage the piecemeal introduction of hardware which results in a complex mix of equipment spanning up to 20 years or more of technology with attendant personnel training and support problems [NEOCS, 1974]. Under conditions such as these careful consideration as to the proportion of time spent in

training to time on the job must not be overlooked as it may be more prudent to obtain a higher proportion of noncareer people to specialize in a given generation of equipment than to frequently interrupt the overall development of career individuals to learn narrow specialist skills soon to be outdated. Lateral entry at advanced grades may again afford a more cost-effective approach under these circumstances.

Equally, recognition of other advances in technology which may alter the composition of forces should be considered. In particular the development of data processing and communications equipment may reduce the administrative tail required by a force by increasing labour productivity and so altering the balance of a force in favour of the combat element and reducing the need for junior and middle level people in the logistic groups.

c. Manpower Management

An effective manpower management system depends on certain key parameters which are highly interdependent and typically involves:

(1) Annual Procurement. This refers to the number of new personnel taken into the system each year to maintain the force at a given size. As will be explained later in the thesis this intake will in many ways form the keystone for the entire system, and it is relatively difficult to identify at the point of entry into the junior level who, as individuals, can be classified as career or noncareer. However, statistical studies should enable the planner roughly to estimate what

percentage of the intake can be thought of as career. In the middle seniority level it is possible more readily to categorize individuals into either of the groups and recruitment can be more clearly geared to the intention of meeting short-term requirements. Procurement at the senior level would be very limited and apply only in a few specialist areas.

(2) Normal Attrition. This denotes the number of people who leave the system by voluntary separation, voluntary retirement, disability, or death. This variable plays an important part in determining the relationship of career and noncareer people. Factors such as retirement plans and economic conditions can influence this rate of attrition and will be addressed later in the thesis. However, the results of a series of studies [O'Gorman, 1972a] indicate that age is the single best predictor of the reenlistment intention. Other variables such as length of service, rank, marital status, and number of dependents were not found to be specifically related to the reenlistment intention beyond their relationship with age.

Figure 3 shows the reenlistment intention as a function of age with suggested rank superimposed for discussion purposes. This indicates that approximately 50 percent of the junior ranks intend to reenlist after their first period of duty and about 75 percent of those who reenlist then continue on until about age 38/41 when there is a reduction in the number intending to continue on (say to 60 percent). For the senior group their intention to stay with the service increases virtually to 100 percent, but this probably mainly reflects more a wish to remain on duty

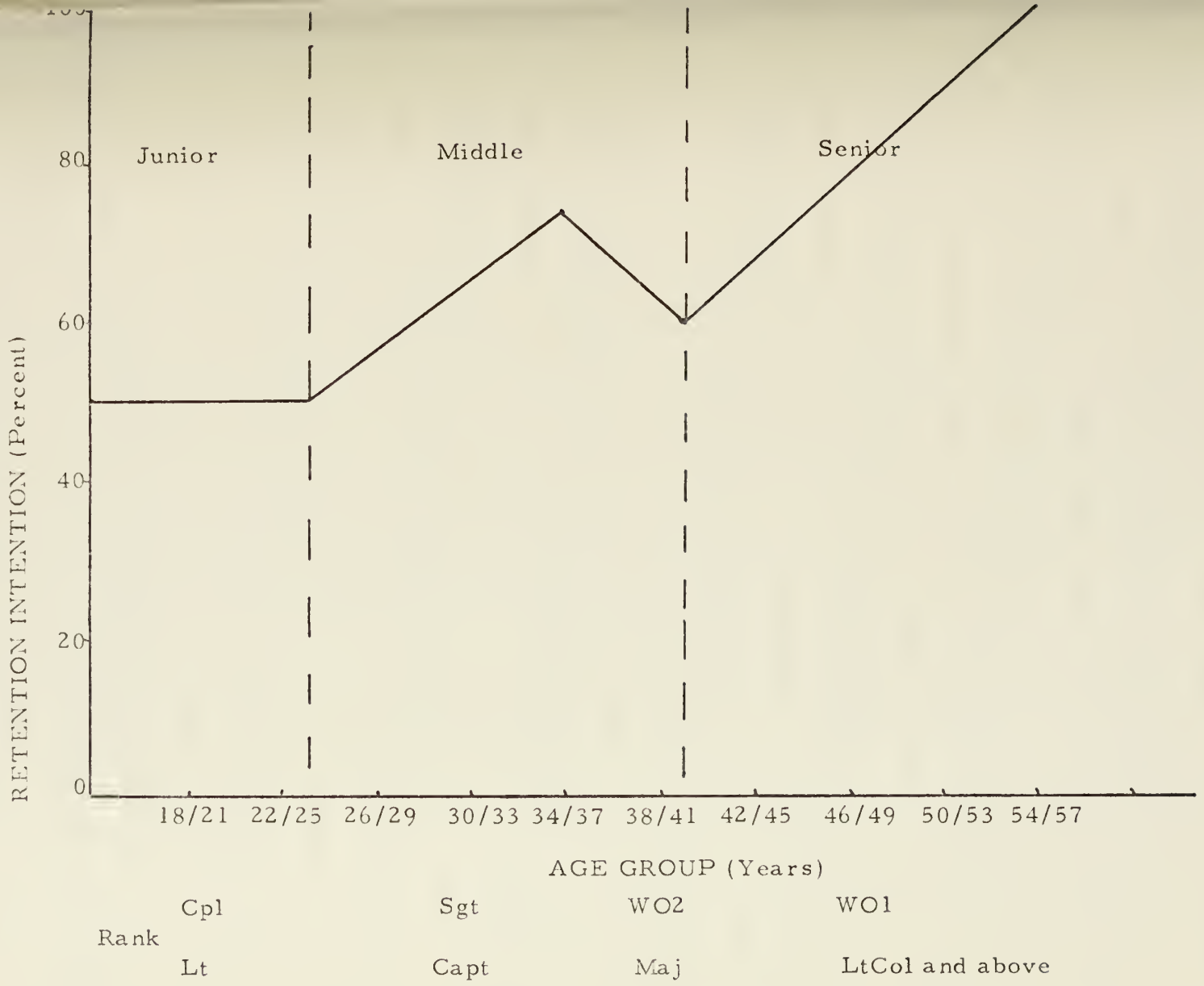


Figure 3. The relationship between age and the intention to reenlist with suggested rank superimposed for discussion purposes.

than a realistic intention to stay with the service.

It is of interest to note that, in these studies, individuals who initially entered the service for a short period of time (three years) were far less likely to reengage than individuals who enlisted for six years [O'Gorman, 1972b]. The reenlistment rate was about 35 percent for three-year enlistees and about 70 percent for six-year enlistees. This may indicate that people initially entering the service for a short period of time are far less likely to reenlist and gives credence to the belief that those who do continue on may be thought of as making a career choice in favour of the military. Examination of Figure 3 supports this as the percentage of individuals professing the intention to reenlist does increase directly with age except for an interruption in the 38 to 41 age group. Higher incidence of the intention to exit in this group is to be expected for a variety of reasons including the fact that when the studies were done the majority of people in this group were covered by a retirement system which provided a pension after 20 years of service. However, statistical tests of the significance of the discrepancy from linearity proved nonsignificant [O'Gorman, 1972a], and it is suggested the apparent increase in discharge intention for this age group is not a reliable effect.

Figure 1 was developed using this data and prompts the belief that the emphasis on annual procurement should fall heaviest in the junior ranks and somewhat taper off towards the top of the service hierarchy where virtually no short-term people will be required from external sources.

(3) Forced Attrition. This represents the number of persons who leave the system by involuntary separation or involuntary retirement. Whilst under the proposed system it would be hoped the noncareer people would be most affected by this management tool, obviously, under some conditions, it may be necessary to apply the involuntary exit method to some of the career force. It is proposed to develop specific methods for applying forced attrition to each of the broad groupings of officers and other ranks in the junior, middle, and senior levels later in the thesis. But suffice it to say, forced attrition can be manipulated mainly through promotion, separation, and retirement policies and is probably more subject to direct management control than normal attrition. For the manpower planner the aim should be to reduce the incidence of forced attrition of the career force, even if only by making voluntary exit more attractive, as significant premature termination of careers could have a most adverse effect on annual procurement activities. To assist in dealing with this aspect the planner may find it helpful to not only carefully assess the desired blend of career and noncareer individuals but also to consider the use of temporary rank structures which can be expanded or contracted in regard to authorized force levels. The ratio of technical specialists to force levels would also have to be examined. It is doubtful that the need for specialists is directly proportional to force levels, and in some cases it may be wise to utilize reserve or civilian forces to account for reasonably small demand fluctuations.

(4) Promotion Point. This refers to promotion timing and considers the normal relationship between length of service and promotion opportunities. This is of crucial importance to the career force and will also influence the considerations of those contemplating a service career.

(5) Promotion Opportunity. This denotes the cumulative opportunity for advancement for those who have competed for promotion to the next highest grade. Both promotion point and promotion opportunity will affect career and noncareer individuals, and unless particular care is taken it may well be that the requirements of the two groups are incompatible. To allow for force expansions the temptation may be to offer attractive promotion opportunities to noncareer personnel which will be to the disadvantage of the career individuals. This may force the system to adopt other forms of compensation such as bounty and re-enlistment bonuses and utilize a separate procedure of promotion for noncareer people which is outside of and not detrimental to the career promotion system. Additional determination based on policy objectives must be made as to the relative proportion of such opportunities to be offered.

(6) Grade Distribution. This reflects the breakdown of the force by the number of individuals called for in each of the various ranks, both officer and other rank. Again a decision has to be made as to the distribution of these ranks in terms of the force components and further decisions as to the ratio of specialist and generalist are required.

(7) Interdependence of Variables. As previously mentioned a change in any one of these variables will usually be the catalyst for a change in one or more of the others. Annual procurement will usually be based on an estimate of the numbers required to sustain the force over time. It is virtually a direct function of losses occurring from both normal and forced attrition. Thus, if normal attrition should accelerate, it would be necessary to increase annual procurement or reduce the forced attrition or effect a combination of both to compensate for increases losses.

As indicated earlier forced attrition can be controlled to an extent through promotion, separation, and retirement policies. The rate of normal attrition cannot be controlled directly but is influenced by a number of factors such as economic conditions, public attitudes, and conditions of service. However, it can be affected indirectly by various retention incentives and compensation tools as well as the kind of career opportunity that is offered.

The career opportunity that can be offered is determined for the most part by the promotion points and promotion opportunity for each of the grades. The promotion points and opportunities in turn are determined by the numbers of individuals that can be promoted to each grade over a specified period of time, which in turn further depends on the grade distribution that is authorized. Assuming that grade distribution is held constant a decrease in attrition (either normal or forced) will retard promotion points or reduce opportunities or both.

Similarly, a reduction in grade distribution without any changes in attrition will usually also retard promotion points and promotion opportunities. [Commanders' Digest 1974].

3. Other Considerations

Other considerations which will influence the determination of the force structure include:

a. Societal Values and Policies

These values and policies will influence the choice as to whether involuntary military service will be permitted, the percentage of Gross National Product to be devoted to defence, and the use of civilians in the defence effort. For this discussion it will be assumed an All Volunteer Force concept is subscribed to, the defence budget is a reasonable constraint for the force planner, and that civilianization is realistically limited by the effect on combat capability and the military rotation base.

b. National Population

The supply of manpower for the military will to a large extent be a function of the composition of its supporting national population in terms of their job desires, demography, and personality/life style. Obviously of particular importance will be the potential recruiting market in the age groups 18 to 22, both male and female, and due attention to forecasts of the characteristics of this group in terms of mental ability and physical standards will be required.

4. Observation

Having established the conceptual framework for the proposed system and noted the interdependence of the various factors it is now proposed to examine in some detail relevant aspects of motivational and career development theories which will form the infrastructure for an analysis of actions that could be taken to make the system effective.

## II. THEORETICAL CONSTRUCTS

### A. MOTIVATION THEORIES

#### 1. Hierarchy of Needs

Maslow's [1954] theory of a hierarchy of needs forms a good foundation for the study as it highlights something which is intuitively appealing and which life experience tends to confirm. Basically Maslow has drawn attention to how one can rank a human being's needs from the very basic physiological to the higher and more complex ones of self-actualization. If the lower level needs are not fulfilled emergence of behaviour influenced by the higher level ones is prevented. This theory appears to have special applicability today as most people in the Western nations are able to enjoy relative freedom from worries over basic considerations such as food and shelter, and they look for satisfaction of higher needs such as a feeling of growth or fulfillment.

#### 2. The Strength of Acquired Needs

It does seem Herzberg [1959] has offered a necessary supplement to Maslow because he makes clearer references to the strength of acquired needs in modern man. Herzberg divides man's needs into two major groups: those focussing on the basic biological demands of the individual and those relating to man's capacity to achieve and through achievement to experience psychological growth. Herzberg uses the terms "hygiene factors" to denote those aspects of a job situation which

provide the prophylactic protection the individual requires and "motivators" to refer to the growth or satisfaction producing factors which are sources of intrinsic rather than extrinsic joy for the worker. Herzberg stresses that job satisfaction is not the opposite of job dissatisfaction. The absence of one does not imply the presence of the other, rather the opposite of job satisfaction is no job satisfaction and similarly for job dissatisfaction. The important point for this discussion is that aspects of the job situation such as pay and fringe benefits are considered to be hygiene factors and so merely by increasing them an employer cannot be assured of increasing job satisfaction which for the modern worker is a most desirable job quality.

3. Expectancy - Instrumentality

Another important theory of motivation is that which deals with expectancy and instrumentality. A good deal of research has been done in this area but of particular concern is the insight provided by workers such as Vroom [1964] who examined the conditions surrounding the individual's participation - withdrawal in an organization. The thoughts here are an extension and integration of earlier studies which suggested an explicit theoretical linkage between satisfaction, motivation, and the organization's goal of productivity [Hunt and Hill, 1969]. It is argued that the higher the value placed on a set of rewards by an individual and the stronger he feels that the probability of receiving those rewards is dependent upon his efforts in the organization, the greater will be his effort. Equally the attractiveness of an organization is said to be directly related

to an individual's belief concerning its instrumentality for the attainment of his goals.

The value of this approach is that it does help to explain variations in attitudes to job situations among individuals and whilst the theory has been only briefly touched on, hopefully enough has been said to demonstrate its relationship with those of Maslow and Herzberg. Of particular significance is the suggestion that different workers will have different needs, some of these needs will be very functional, but others will be on a higher level and possibly more difficult to satisfy. Also the individual will in his own mind evaluate the wisdom of his staying with an organization in terms of its ability to provide him with access to those goals for which he is striving.

4. Many Motivators

Further to the above mention of an individual having many needs, it must be kept in mind that in any organizational setting a wide range of reasons for individuals to participate in that environment will exist. Unfortunately, an individual may at some time find his range of motivations in conflict rather than complementing each other, and this can adversely affect his performance and force him to reconsider his future plans. Equally, such a situation can lead to inter-worker conflicts.

## B. REFLECTIONS ON THE MILITARY

For years Western military leaders have appreciated the wisdom of catering for the physical needs of their men, and officers have been

trained to be responsive to the requirements of good morale. However, as the previous discussion suggested, the modern serviceman will require more attention to his higher needs instead of well-intentioned, paternalistic policies smacking of a Theory X approach, which McGregor [1974], inter alia, characterises as assuming: First, with respect to people, management is responsible for directing their efforts, motivating them, controlling their actions, and modifying their behaviour to fit the needs of the organization. Second, without management's active intervention, people would be passive -- even resistant -- to organizational needs and must therefore be persuaded, rewarded, punished, controlled, and their activities must be directed; and the average man is by nature indolent, lacks ambition, dislikes responsibility, and prefers to be led.

What will be required is more of what McGregor calls "Theory Y" involving a belief that amongst other things:

(1) People are not by nature passive or resistant to organizational needs; they have become so as a result of experience in organizations.

(2) The motivation, the potential for development, the capacity for assuming responsibility, the readiness to direct behaviour towards organizational goals are all present in people. Management does not put them there. It is a responsibility of management to make it possible for people to recognize and develop these human characteristics for themselves.

(3) The essential task of management is to arrange organizational conditions and methods of operation so that people can achieve their goals best by directing their own efforts toward organizational objectives.

In essence an application of "management by objectives" [Drucker, 1954] rather than "management by control" is suggested. This does not mean that any lowering of standards is being called for but rather a realization of the need to adjust management techniques to achieve optimal utilization of human resources. Much has been written about the difficulties of large formal organizations operating in a period of emphasis on individual personal growth. Probably a succinct expression of the difficulties is provided by Argyris [1957] who suggests that if the principles of formal organizations are used as ideally defined, then the employees will tend to work in an environment where -

(1) They are provided minimal control over their work-a-day world

(2) They are expected to be passive, dependent and subordinate

(3) They are expected to have a short time perspective

(4) They are induced to perfect and value the frequent use of a few superficial abilities

(5) They are expected to produce, under conditions leading to psychological failure.

Whilst this is certainly an inaccurate picture of even the traditional manner of the general employment of military personnel, there is a similarity

between Argyris' view and the often expressed popular stereotype, or rather caricature, of military life. Inaccurate as this representation may be, unfortunately there is, as will be discussed later, evidence that it is a reasonably widespread belief. In fact it would seem that in many cases such a stereotype is a more accurate portrayal of life in civilian organizations, e.g., production-line work, routine clerical jobs. However, the point is that if such an unattractive image is allowed to exist it is obvious that it will have an adverse effect on the flow of potential recruits.

Another development that may well affect the military is what might be called its increasing "demilitarization". By this is meant that whereas there once was a distinct profession of arms which concerned itself with matters unique to its own role, an increasing transferability of skills between the military and civilian sectors is now apparent. A recent study has found that in the U.S. military only one person in five currently performs a purely service related job which has no close equivalent in civilian life [Beam, 1973].

Whilst the total impact these changes in needs and employment duties will have on the military is not clear, it does seem feasible to suggest that they have some potential positive and negative aspects. A closer alignment of civilian and military job requirements gives more flexibility to the manpower supply curve, but simultaneously it increases the demands placed on the services to make a period of duty attractive enough to procure and retain adequate numbers of people.

## C. CAREER DEVELOPMENT

As a first step in examining the development of a career it should be noted how an individual personality is seen to develop. The pattern of motives, values, and perceptions which an individual possesses is said to be a product of the interaction of his biological characteristics and his experiences from infancy to adulthood. Essentially this means that whilst all individuals strive to solve the problems confronting them the variety of different experiences sustained leads each individual's system to develop differently. For this discussion two related points are relevant:

(1) Different individual systems develop with different patterns of needs, values, and perceptions.

(2) Individual systems are not static but continue to develop as they encounter new problem experiences. [Lawrence - Lorsch, 1969, p. 67].

It should also be recognized that the terms "occupation" and "career" are not synonymous. An occupation is a type of work activity in which people engage, a group of similar tasks organized in similar ways in various establishments, an activity that has a market value and in which people are therefore paid to engage. A career, by contrast, is the sequence of occupations, jobs, and positions engaged in or occupied throughout the lifetime of a person. Essentially it can be said that an occupation is what a person does whereas a career refers to the course pursued by an individual over a period of time [Super and Bohn, 1970].

1. The Career Model

The career model as described by Super and Bohn [1970] provides a useful point of departure for examining a typical career development process. The individual is viewed here as moving along one of a number of possible pathways from his family position in the socioeconomic system, through the grades of the educational system, and into and through the jobs of the work system. The starting point is the father's socioeconomic status. From there the individual climbs a certain distance up the educational ladder at a speed determined partly by personal (psychological and social) characteristics, and partly by the active interventions of teachers, counselors, and employers. In this system the individual enters the world of work at a point that is fixed in part by the rung on the educational ladder he has reached at the time of leaving school for work. He then progresses through an entry job into one or more other jobs which may or may not be related to each other as, for example, the rungs on a ladder.

2. Life Stages and Careers

Super and Bohn reject the hypothesis that the majority of people move immediately to their life's undertaking and instead favour the concept of a general drift through a series of successive approximations towards a place in the world of work. In their model an individual begins his search for his life's work even before he enters the marketplace, and they relate the unfolding of careers to a series of vocational life stages. As this approach appears to have relevance to the data

previously examined regarding service in the military, it is considered worthwhile to elaborate on it.

a. Growth Stage (Birth - 14 years old)

This is a period of physical, psychological, and social growth. Here the individual develops ideas about what he can do, what he likes to do, and what others expect him to do: his self-concept begins to take form. Vocationally he acquires concepts of a number of occupations, including those engaged in by his parents, his neighbours, and the people he sees and hears or reads about in books, television programs, and at school. Whilst childhood is predominantly a fantasy stage, it is an important stage wherein a child begins to develop his attitudes towards the attractiveness of certain careers. Obviously a child exposed to an inaccurate portrayal of service life could, even at this stage, begin to reject the possibility of a period of military service.

b. Exploration Stage (Age 15 - 24)

Adolescence is more than the others an exploratory stage in which the pubescent adult tries himself out more self-consciously and more realistically than he has before in various adult roles. Planning so that aspirations and opportunities may be more nearly congruent and so that abilities and interests may find outlets becomes a valued characteristic and skill. This process can be thought of as one of compromising or synthesizing in which personal and social considerations are weighed and vocational decisions are made. These decisions are still exploratory at first with an initial decision being merely to try something out. Later

if such decisions are not reversed by negative experience, commitment to them increases with involvement and with the investment of time, money, and pride. This approach is reflected in the data previously presented, especially in support of Figure 3, where it was noted that there was a distinct tendency for the retention rate to increase with length of initial period of engagement. It also suggests that during this exploratory stage individuals may be encouraged to enlist in the military purely on a trial basis if they consider it as a possibly appropriate field for their career.

c. Establishment Stage (Age 25 - 44)

During this period the exploratory activity that characterizes adolescence begins to be replaced by more of a commitment to an occupation as a career. This commitment becomes more definite with the realism brought about by modified aspirations for using abilities and by finding outlets for interests in a world that is now better understood. However, it should not be assumed from this generalization that all individuals will follow this pattern. Some people may at any stage reverse their occupational choices. It also has to be recognized that some who appear to have become established are disestablished by internal or external developments. For example, in the studies described by Figure 3 a tendency was noted in the 38 to 41 age group to change career direction. Analysis of stability and change in careers has shown that some people continue to change occupations or jobs throughout life, whilst others have periods of stability followed by new periods of trial --

which in turn lead to stabilization for a second or third time [Super and Bohn, 1970]. It has, however, also been observed that socioeconomic determinants do appear to operate in that stable and conventional career patterns are more common at the higher socioeconomic levels whilst multiple-trial and unstable patterns are more common at the lower levels. In trying to assess the annual procurement needs for a force these findings can be most helpful for the planner who can use them to build into his calculations a factor to allow for variable wastage rates in the various components of the total force.

d. Maintenance Stage (Age 45 - 64)

This is the stage in which the senior ranks of the force generally find themselves. It implies that what has become remains. However, it must be remembered that even during this stage some re-adjustment must take place if the individual is to remain an effective and valuable member of the organization. Changing technology and other considerations demand that the individual must still be prepared to learn and adapt his performance to meet the requirements of the situation currently facing the force.

e. Decline Stage (Age 65 on)

By this stage the individual can be expected to have separated from the military and may have developed new roles in a further career, first as a selective participant and then as an observer rather than participant.

### 3. Observation

From this discussion of career models it is possible to see how any approach to dealing with the management of a force's manpower must take into account a number of discrete groups rather than attempting to adopt one general strategy. However, before attempting to develop methods for dealing with each group it is considered necessary to briefly mention some aspects pertaining to the future which may influence military planning.

## D. FUTURE DEVELOPMENTS

When looking ahead in an attempt to forecast the state of the world in 20 or more years hence, a potentially confusing and contradictory scenario can greet the manpower planner. Economic developments can suggest that energy and food shortages may lead to great sources of unrest. The difficulties of serious inflation can be construed as forcing organizations to espouse the primacy of cost effectiveness over the value of human resources. The possession of nuclear weapons may become more widespread amongst nations and increase the probability of misuse. Alternatively, the emphasis on quality of life aspects, the gradual raising of the popular education level, a rejection of centralized impersonal Government, and the impact of society on technology may suggest that periods of stability are in store. Despite the difficulties of such projections and because of their applicability to the problems of manpower planning, three issues are worthy of note.

1. Guaranteed Income

One of the problems bedevilling the military personnel manager is how to arrange compensation schemes so that those individuals subjected to forced attrition are treated equitably. One possible development that may ease this burden is the advent of a national guaranteed income plan. Whilst many of the schemes proposed at present are aimed mainly at welfare payment issues [Samuelson, 1970] it is possible these techniques could ultimately be employed on a more general basis. Essentially such a plan revolves around the use of a negative income tax. Some annual income figure is established as the minimum an individual is entitled to receive and those earning above it pay taxes on a progressive basis. However, those earning below the minimum would receive an additional income from the Government based on a formula gauged to leave them with more income after they have used their own efforts to raise their private earnings to some extent than if they had made no such attempt. Thus, even when their total tax is negative the marginal tax rate is always a positive fraction less than unity. Such a scheme has the virtue (as opposed to many present systems) of offering an incentive to all groups to maximize their individual efforts.

If an adaptation of this approach were to gain popular acceptance it would probably mean that the retirement pension schemes of individual organizations would lose some of their potency. People may then be less concerned with them as they could feel that, come what may,

they would be guaranteed at least a respectable source of income and so be more willing to offer their services on a short-term basis.

2. Functions of Work

If technological progress continues [Kahn and Wiener, 1967] it can be argued that there will be a reduction in the amount of work that needs to be done, and the function of work in society may assume new roles. It has been suggested [Best, 1973] that work will be increasingly viewed in terms of being an occupation or an interruption to other more desirable activities, such as leisure or an appreciation of the arts or learning. Social norms would cast those who found in work a vocation into the role of being selfish, excessively narrow, or compulsive. Even those who professed to be interested in a career would be expected to show a high degree of interest in activities external to the work situation. Obviously for an organization like the military which has always required special commitment from its members such developments would have many ramifications and may force fundamental changes upon its modus operandi.

3. Changed Sex Roles

Whilst the impact of the changes in the sex roles will be returned to later in the thesis it should be noted here that a revised role characterization for the female will impact on the military in two main ways. Firstly, it would affect the relationship between the serviceman and the military in terms of his willingness and ability to react to the demands of the service. Reports are now being received [AP, 1974]

that career individuals are becoming increasingly reluctant to relocate their families because of conflicts with the career intentions of the wife, and this is only one aspect of the many difficulties that may arise. Secondly, the increasing presence of women in the labour market may be very advantageous in terms of offering a new source of manpower to the military.

## III. SUGGESTED POLICIES

Using both the theoretical constructs previously presented and the results of other research it is now proposed to suggest some techniques and policies that may be adopted to improve the responsiveness of the various manpower groupings to the short-term needs of the military.

### A. JUNIOR OTHER RANKS

Possibly this is the most important group because it is from here that all the other groups can to some extent be manipulated. Fortunately it is also the group which in many ways can be most easily controlled. Based on statistical data concerning retention rates it is feasible to assess what the total impact on the career nucleus is likely to be by varying the rate of annual procurement of junior personnel. In times of a need to reduce the force size the approach can be to reduce the annual intake, and in times of expansion a higher recruiting objective can be established. Care can be taken to offer a variety of enlistment contracts and, if deemed necessary, a higher proportion of relatively short time enlistments (say two or three years) can be included in the procurement plan to ensure the manpower manager can reasonably quickly reduce the force size. It may also be prudent to base some short-term recruitment on filling certain technical appointments which are clearly seen as non-career positions, but are still essential to overall force efficiency.

Traditionally in Western countries enjoying relatively sound economic conditions and not faced with any unusual threats, the problem has been more one of attracting sufficient numbers of acceptable recruits rather than rejecting a qualified oversupply. It is therefore proposed to comment briefly on enlistment incentives.

1. More is not Necessarily Better

A temptation is to suggest that the number of recruits obtained will be directly related to the attractiveness of the incentives offered. This, however, is not necessarily so. In a study which brought out a number of relevant points, Glickman [1973b] initially set out to determine which change strategies and under what conditions would such strategies prove effective in attracting young people to the services. The logical base for the research was the theory of incentives as a change mechanism where it is assumed that if you offer people the opportunity to obtain rewards they value they will modify their behaviour both to obtain and then subsequently maintain the reward flow, i.e., "shaping" and "maintaining" behaviour by "reinforcements." Implicitly, amongst other things, this theory assumes that the value of the reward is independent of the context in which it is offered and that, following the old economic theory, "more is better".

In fact Glickman found "more is sometimes worse" and he felt this could be due to the development of a credibility gap on the part of the subject who feels there must be some hidden catch. Additionally, the recipients also appeared to feel that some equity norm was being

violated and that they were, in fact, being subjected to a form of gross manipulation. It was noticeable that, whilst reasonable offers of hygiene-type incentives were effective, probably the most successful response was accorded to measures offering the individual some form of "fate control" and participation in selecting his future activities and life style. The survey also demonstrated how the youths tended to evaluate military opportunities with regard to the civilian life style they were accustomed to. Socioeconomic status correlated with the attractiveness of incentives in terms of the lower socioeconomic groups favouring financial and other incentives which they perceived as increasing their upward mobility, whereas higher level groups tended to place more emphasis on educational training and retirement benefits.

This study suggests that careful thought needs to be given to the selection of incentive offers. It tends to confirm the theoretical ideas previously presented that motivators will carry more weight in an individual's evaluation of an employment opportunity and that goal congruences between the organization and the person will be sought.

2. Overcoming Negativism

Building on this mention of the attitudes that youths may display towards a military tour of duty and the suggestion that financial (or hygiene type) enticements alone are possibly not going to be strong enough in the future, it is interesting to consider the results of a related U. S. Army study. In examining problems anticipated in the recruitment of suitable youths for the 1970's a special U. S. Army study group [1971] reported

that one of the essential points to note was that today's youth require styles of leadership which do not depend on fear and punishment in obtaining discipline. The Army would, therefore, have to allow individuals to participate more fully in deciding on job assignments. The Army would also have to be permitted to exercise greater discretion in ensuring that the hygiene factors of pay, training, and so on were kept at realistic levels and, more importantly, that the intrinsic factors concerning job satisfaction received constant attention. The emphasis on personal growth and a form of self-determination is again apparent, suggesting that the military must pay closer attention to the higher needs. And yet, often political factors restrict them in this area.

3. Attitudes of Youth

The above-mentioned research indicates that youths do hold certain beliefs about the Services and an understanding of them can be most helpful to the military. To see more clearly the expectations held by potential first-term recruits, it is of value to note the results of one recent two-year survey of non prior service individuals. The study revealed that they rate the military services high on providing a secure, steady job (40%) and adventure and excitement (40%). A somewhat smaller percentage felt the services offered recognition and status (37%). However, they felt there was little probability of making a lot of money in the service and, equally, they felt that there would be a certain loss of personal freedom [AFHRL, 1973].

Incentives to enlistment were seen as:

| | |
|---|---|
| Very strong | opportunity to travel |
| | paid college education |
| Strong | skills training |
| | choice of assignment |

Whilst deterrents to enlistment were:

- extended time away from home
- high risk of injury
- strict discipline / training conditions
- poor living conditions for singles

Whilst there is some possible inconsistency in these results, e.g., opportunity to travel applauded yet time away from home criticised, they do serve to confirm the earlier statement that the military stereotype is still apparently a fairly popularly held concept and that many people are unaware of the self-development and potential for higher need fulfillment that military life can offer. It is also reasonable to assume that, remembering the career model previously discussed, a number of these attitudes have been formulated as a result of parental and school experiences.

It would be repetitious to chronicle the results of numerous other surveys of youths' attitudes, but suffice it to say that, based on many studies [Johnson, 1974; Lockman, 1972; Mullins, 1970; Valentine and Vitola, 1970] the young people who might volunteer for military

service are, compared to their peers, probably less well educated, score lower on aptitude tests, and are commonly attracted to the service by opportunities to develop a skill or receive education, although many are not firmly committed to a military career at the time of enlistment. It should, however, also be noted that a number of these people do indicate a sense of patriotism and an attraction to the Service as a career. This feeling is apparently based on their assessment that the military way of life would suit them.

4. Some Suggestions

Drawing on this information the following suggestions are offered:

a. Attitudes

To enhance the supply of manpower there must be some attitude changes in various areas. The nation as a whole should be shown that the military forces have more to offer than the most rudimentary physical skills. They must be acquainted with the ability of the services to offer rewards beyond low-level needs fulfillment. Whilst many people appreciate the fact that the services can provide training, all too often the training being considered is pseudo-technical, and the ability of the services to offer training in higher level skills and personal development is not appreciated. This means that, especially in times of high demand for new recruits, every opportunity must be taken to present a realist portrayal of the Serviceman's life. Use of media advertising, unit "open days," and Service participation in community affairs are called

for. Special attention must be paid both to the size and quality of the recruiting force. If necessary, specially selected officers should be assigned to take charge of recruiting areas and in particular they should be charged with the responsibility of communicating the value of a service tour of duty or career to the educators, parents of prospective enlistees, and community leaders.

The higher level policy makers in Government must realize that defence does not come cheaply now. Calls to patriotism and self-sacrifice for the good of the nation are either heard by a few or are unable to be answered because of other commitments. It must be recognized that one of the biggest drawcards, for those who are aware of it, is the services' potential to increase an individual's human worth by training him and giving him an opportunity to find self-development whilst at the same time providing for his security needs. Besides attempting to widen the general knowledge of this incentive the policy makers must allow the military to maximize their use of it by offering training courses in a more generous fashion. As previously discussed, military and civilian occupational skills are showing a tendency to fuse and at the same time people are feeling a need for more fate control and opportunity to achieve self-determination. Against this background, the Government should recognize it may be self-defeating to demand the traditional periods of payback service for training and to deny individuals the opportunities to develop their talents in an area because it has no apparent military application. Whilst this is not a call for the transformation of the military

into a wholesale purveyor of education, it is suggested that a more liberal policy should be adopted, consistent with the operational and financial constraints that must be considered. It should also be recognized that skills and personal development training by the services benefits the nation as a whole as once the serviceman reenters the civilian work force he is a more valuable human asset to any organization.

The military, itself, must also recognize the need to examine closely examine its own attitudes. As mentioned previously, it must strive to show the nation what it really has to offer and ensure that the highest possible standards are maintained to attract people of the desired calibre.

Probably more attention must be given to the "whole man" concept. Instead of seeing an individual as one extra serviceman it should think of the person in both his private and work role. Possibly more flexibility should be introduced into job assignments both to allow members to spend an increased amount of time in a given geographic area and more clearly to respect their wishes.

Another aspect worthy of consideration is the military's requirement to insist on contracts of service. This is a very difficult subject and obviously has many sides to it. It can be seen as offering the individual security of employment and as assuring the military of a guaranteed labour supply in times of urgent need. However, it can also be very dysfunctional by restricting the service's ability to respond to manpower demand fluctuations and may be inconsistent with present

value systems. As many individuals stress the need for fate control and at the same time express ignorance of the service it is feasible to suggest that some worthy people reject a period of military service because they see the "service contract" locking them in. If the service contract is considered essential then possibly it should be reduced to the minimum feasible length and potential enlistees should be allowed an experience tour (a probationary period for both parties) before being required to sign on. However, as previously reported, some relationship has been established between the length of initial enlistment and retention rate. Those who engaged for six years were found to be twice as likely to make the service a career as those who initially volunteered for only three years. It could, however, be reasoned that those who opted for the longer period in the first place were more career oriented at the outset. The actual decision as to the value of service contracts would require more data, but it should be noted by the manpower planner that whilst the relationship is not entirely clear there is a suggested correlation between recruiting, retention, and length of contracts of service.

b. Pecuniary Rewards

One of the practical key points in the use of short-term personnel is to ensure that they do not suffer material hardship because of their period of duty. In dealing with the junior ranks this problem should not be too difficult to overcome as they can be offered valuable skills and other training which, coupled with their relative youth at the

time of exit, should allow them fairly readily to transfer to a nonmilitary occupation. It is recognized that for some groups this transition may be more difficult than for others. Of particular concern would be those who enlisted in combat arms where the training provided would largely be purely service oriented. It is suggested that, to maintain a credible force, a high percentage (say, at least 25 percent) of all new recruits would have to be prepared to serve in these areas. Desirably, a significant proportion of this group could be offered a service career, but to ensure a viable and responsive program, it may be necessary to offer some additional incentives. One approach could be to provide an enlistment bonus for those who were prepared to serve in these specialties for a period of, say, three or four years. Depending on the need for people in the combat elements the bonus could be varied accordingly. It may also be worthwhile to offer this group at the end of their service a period of retraining (based on the length of their duty) which would then assist them in finding suitable alternative employment.

As education and training have repeatedly been shown to be strong motivations for enlistment it may also be worthwhile to provide enlistment options which are clearly tied to a limited period of duty (say two years) followed by a reasonable period of assistance with civil schooling. Such an option would be dependent on satisfactory completion of service and would have the additional advantage of stimulating best performance from the individual whilst in the military.

c. Female Labour

Another source of short-term enlistees, as well as potentially supplementing the career force, is the female labour supply. Traditionally the military has restricted the inflow of women to mainly noncombatant, clerical/administrative type positions. However, changing social values have provided women with a much greater potential for employment. The U. S. forces have recently greatly increased the percentage of service areas of duty [Tamplin, 1974] open to women as shown in Table I below:

Table I

Percentage of Military Positions Open to Women

| Service | June 1971 | Oct 1972 |
|---|---|---|
| Army | 39 | 89 |
| Navy | 24 | 96 |
| Air Force | 51 | 98 |
| Marines | 36 | 31 * |

Note. *As of July 1974 this has been increased to 72.

In 1974 there were 60 thousand women in the U. S. forces [Schlesinger, 1974, p. 189-190] and the target is to have 130 thousand in the forces in 1978. The U. S. forces have reported an average term of service for women of 2.70 years in 1973 (up from 2.44 years in 1972) and this would suggest that a controlled flow of female recruits may be greatly beneficial in aiding any plan for a fluctuating force strength.

## B. MIDDLE OTHER RANKS

This group is of considerable importance because it is at this stage many individuals will face the personal decision of whether to reenlist and virtually decide to make a career in the services, whilst simultaneously the manpower planners must be considering whether to accept such people as part of the career nucleus. Reenlistments offer the service the advantages of reducing the requirement for non prior service personnel and substantially lowering training costs. However, if excessive numbers are accepted into the career force this can reduce the flexibility of the manpower system and so what will be sought is a balance of career and noncareer people whose period of duty can be terminated or extended at reasonably short notice. It may also be prudent to obtain some of the noncareer people from outside of the services. To gain an understanding of what additional factors may influence the deliberations concerning this group it is proposed to review some related research findings.

### 1. Possible Rewards for Work

When considering how to retain employees or to attract experienced people from external sources the studies by Porter [1971] on the possible rewards in a work situation have merit. Projecting himself into the future Porter undertook a study to highlight the need for organizations to assume a more vigorous and imaginative role in contributing to employee motivation. He challenges industry to accept and act upon two assumptions:

a. The behaviour of individuals is definitely modifiable

b. The work environment is definitely modifiable.

He claims that the prime role for an organization now is to make work more rewarding and suggests closer attention be paid to developing ways of connecting rewards to specific work behaviour. He points out the work situation offers the individual a number of different types of rewards and these can be derived from the organization, the immediate supervisor, the work group, and the person himself. Porter talks about the rewards in terms of their financial, interpersonal, intrinsic to work, and developmental characteristics. Some of the ideas he feels an organization should consider are giving workers:

- an opportunity to schedule own hours of work
- a degree of self-determination in how time is spent on the job
- ability to choose any area of the organization to work in for a limited period of time
- on-the-job, nonwork activities
- accrual of time off for educational leave and civic activities
- intercompany exchange of employees.

The theme of make "work more like fun" is noticeable in this approach, but it is consistent with the expressed views of individuals that they want more fate control and that job satisfaction is of fundamental importance to them.

Whilst it is not suggested it would be feasible for an organization such as the military to adopt all of these ideas it does seem reasonable to suggest that some of them could be introduced without any loss of effectiveness and, indeed, one would expect a definite gain in productivity as members became more motivated and began to perform at a higher level.

2. Commitment to the Organization

In attempting to appreciate how an individual may arrive at his decision to exit, Porter, et. al. [1972] provide some useful suggestions by measuring the longitudinal changes in employees' attitudes toward their employers. This study revealed that when an attitude survey indicated a decline in commitment this was likely (though not invariably) to be signalling a voluntary termination in the near future. The evidence suggested no one single factor prompted this falling off of commitment but rather the effect was more one of a general feeling of dissatisfaction or no job satisfaction gradually spreading throughout the worker's global perception of the value of his continued affiliation with the organization.

Porter's research failed to establish the direction of the causal relationship -- viz, whether it was a decision to leave followed by a decline in commitment or vice versa. However, it does serve to indicate the complex nature of job satisfaction and job dissatisfaction. It also points out an organization can make use of an apparent decline in a worker's commitment as an early warning of an intention to exit and, if it so desires, it can take steps to try to stimulate the individual to remain. Additionally,

it highlights the desirability of senior commanders being kept apprised of the feelings of their subordinates, at all levels, in terms of job satisfaction issues.

3. Career Intention and Decision Making

Another examination of the decision making process is provided by Schneider [1973] who used expectancy-instrumentality theory to demonstrate how an individual will utilize his belief in the value of a given organization for obtaining his chosen goals as a standard against which to assess the instrumentality of selected alternatives. Schneider indicates how during this decision making process the person is really also reevaluating the instrumentality of the standard organization. This means even people who have expressed a desire to "stay with the fold" should not be ignored as over time their attitudes and assessments may change to the extent they decide to exit. In the same vein as Porter, Schneider also draws attention to the opportunity for an organization to take steps to rekindle a member's enthusiasm for it once it learns of his intention to exit.

Again, considering a career choice as a decision-making process, Nelson & Wilbur [1972] discuss how a decision to reenlist in the services effectively constitutes a career decision. They reason that this choice is made against a background of better knowledge of the service and a tendency to base such decisions on a comparison of income streams from military and civilian jobs. They also feel that during this

process the decision maker will tend to discount the civilian income stream somewhat as he considers more uncertainty enters into that area.

4. Central Life Interest

In trying to appreciate what other aspects may influence a decision to reenlist or enter the military at a more mature age it is worthwhile to examine the concept of central life interest as described by Dubin [1973]. He points out how the population can be divided into three broad categories. There are those whose central life interest is work oriented. Another group is nonwork oriented and evaluates their present work environment in terms of its instrumentality for their achieving nonwork goals. A third section can be defined as having "no preference" either way. Recognizing that all groups would equally evaluate situations that are extremely bad or good, Dubin reports that generally job satisfaction is highest amongst the work-oriented group and lowest amongst the nonwork-oriented group with the no-preference section having intermediate satisfaction. Dubin claims the intrinsic satisfaction of the work itself is the essential experience which distinguishes the three groups.

This study provides a clue to the fact some people will be prepared to participate in a work situation not because of the work satisfaction it gives them but rather because it allows them an opportunity to exercise other interests which give them their feeling of satisfaction. In attempting to recruit short-term people the military

may be able to take advantage of this, especially in the technical/ professional areas.

5. Marriage

As the majority of individuals falling into this section will probably be married it is interesting to consider the possible effects this may have on them as regards their career plans. An analysis carried out by Glickman [1973a, p. 21] led him to conclude that marriage increases the serviceman's problems by creating:

a. difficulties over forced separations from the family

b. a feeling of lack of control over where to live, raise children, etc.

c. difficulties arising from a perceived inability to play the role of "father" and provide psychological support for the wife

d. a "burr effect" which makes the serviceman see the military's leadership in a more critical light.

Alternatively Glickman found marriage forced the individual to take his job benefits more seriously and to place a higher value on job security.

From this survey one could suggest that marriage has the potential for robbing the individual of some of the intrinsic rewards he should be able to expect and compensating him by increasing the stress on extrinsic ones. However, this analysis omits the situation where the family unit does enjoy the military life style and so the individual enjoys

a sense of job satisfaction possibly at an increased level as he feels he is more than adequately able to provide for his family's wants.

6. Reenlistment

In addressing the various aspects of incentives for reenlistment the findings of various surveys should be enumerated. Lockman and O'Neill [1973, p. 8] analysed the results of a number of surveys to reach a description of the person who reenlists as compared to those who decide to exit:

a. he probably has lower socioeconomic status and civilian job expectations
b. a poorer opinion of civilian life is held
c. the immediate family is favourably disposed towards a service career
d. he holds better opinions of general service conditions
e. higher morale is exhibited
f. he experiences greater satisfaction with most aspects of the job.

The constant themes brought forward for rejecting a service career after one tour of duty are [Wilgove, 1973; Stoloff, 1972; O'Gorman, 1972] a feeling of deprivation of personal freedom, a lack of job satisfaction, and an objection to the form of supervision experienced which is perceived as being overly critical and unhelpful. Thus fundamental differences in experiencing the service environment seem to exist and

again this supports the contention that the pursuit of service life requires some form of special commitment or compensation.

7. Some Suggestions

The main thrust of this section has been to imply that it will be to the advantage of the military to encourage as high a retention rate as possible. Previously the benefits of such a policy in terms of assistance to the annual procurement program and training costs were mentioned but an additional factor is that if potential reenlistment rates are high the services can then be more selective in whom they will reengage. It is doubtful that a 100 percent retention factor would serve the military's best interest mainly because of its need for a high proportion of youthful employees. However, to ensure the maintenance of the force at reasonable efficiency it is highly desirable it be fairly sure of a supply of acceptable and seasoned people. The actual manpower demands in existence at any one time will then determine the number of people to be reengaged. Faced with the need to ensure that the personnel system can be responsive to short-term fluctuations, the manpower planner has various approaches open to him.

a. Specialist/Professional Positions

Rather than utilize career people in all specialist/professional positions it may be wiser to set aside a proportion of these to be filled by individuals obtained from the external labour supply on a short-term contract basis (e.g., three years). These people may have had previous military experience or be nonprior service types. Drawing

on the ideas of Porter and Dubin it may be necessary to offer them additional special attractions such as an undertaking to provide an opportunity to travel, to allow them experience of certain types of duty which will enhance their professional worth, or to provide them with the job security they need whilst in their own time they undergo further technical training. Obviously, particularly with the nonprior service category, it will be expected that their use to the military will be mainly limited to the given field of expertise but, if necessary, short periods of indoctrination training could be called for to broaden their scope of employment.

b. Reserves

To meet very short-term (up to one year) needs a scheme could be devised whereby suitably qualified members of the reserve forces could come on active duty. A desirable arrangement would be for their civilian employers to grant them a form of sabbatical leave wherein they could pursue their hobby - the military life. Equally, the reverse approach could be used by the military to reduce the career force at times of over supply. Whilst this idea may now seem unique, if the trends suggested by the researchers in the field of motivation and work come to fruition, such a practice would be common in industry.

c. Civilians

A proportion of the mainly administrative/technical positions could be considered as being available to either military or

civilian personnel. In times of expansion civilians could be recruited to occupy them and in times of force contraction they could be looked upon as holding positions for career military people whose special military skills are to be preserved for future use.

d. Critical Skills

In some areas, especially amongst those specialist skills where a premium wage can be commanded on the open market, the military may find itself with the problem of trying to retain an adequate number of such individuals. To cope with this problem reenlistment bonuses on a cost-effective basis could be offered in return for a commitment to serve for a stipulated number of years. The actual size of the bonus would be determined by a trade-off between training costs and the severity of the shortage of these skills. When no shortage exists the bonus would not be offered.

e. Combat Arms

A particularly difficult area to deal with is how to attract the desired supply of short-term manpower into the combat arms specialties. This supply would largely come from the internal labour market and would not enjoy the expectation of long-term employment in the military. Additionally because their skills would be primarily military in nature they could not hope to find a ready market for them in the civilian sector, and the difficulties of finding alternative employment would probably directly increase with their age. This problem is

implicit in the career model concepts previously discussed and would have an impact on the total procurement activity unless dealt with effectively.

The use of reserve forces could ease the problem somewhat but the main emphasis must be on the employment of people rising up through the junior ranks. Probably the solution would come from a two-point approach in terms of making the services an attractive enough environment to work in so that adequate numbers would want to accept short-term reenlistment contracts, and, secondly, special arrangements to provide for the hygiene factors of pay, fringe benefits, and other extrinsic aspects would be required. Fortunately, any efforts in this direction would also provide salutary effects both for the career force and in the attraction of short-term enlistees from external sources.

(1) Environmental Enhancement. The requirement here will be to recognize that social norms are calling for a greater emphasis on the needs of the individual and that an individual will be increasingly influenced by the impact his work has on his entire life. The requirements of service life are such that families are exposed to more trespassing in what should be their private domain than in most other occupations. Thus the military must be prepared to offer special compensations to them. Matters such as housing facilities, recreational opportunities, welfare, and medical systems should receive special priority. Families must feel that they are also being considered by the military organization,

and there must be attempts made to assist the serviceman with service-generated, domestic problems rather than leaving him to cope with these mainly on his own. This is not to say that the military have not previously recognized their responsibilities in this direction, but renewed emphasis and a broadening of the effort is necessary.

In keeping with the theme that the "whole man" concept is very important, and paying due homage to the popular view that the 1970's are the decade of people [Beam, 1973], consideration as to new ways of allowing individual attitudes and opinions to be heard up the chain of command are recommended. Use of surveys, discussion groups, and an open-door policy are helpful, but deeper approaches such as a military, industrial-relations organization need consideration. Possibilities such as an ombudsman, a trade union organization, or a military association spring to mind as ways of giving an individual a voice in the conditions under which he serves. Probably an ombudsman would not be able to react promptly enough to local issues and as trade unions are tainted with the image of unreasonable militancy, a military association may prove most effective. There is no suggestion here of eroding or debasing the essential chain of command, but merely of supporting it by offering individuals an accepted method of ensuring their views are being taken into consideration when decisions affecting them are being made. As pointed out previously in the research findings, this factor is of increasing importance and would probably be most likely to apply to

the mature group under consideration. Further, it would also assist policy makers in assessing the extent of commitment amongst their subordinates.

(2) Extrinsic Factors. Whilst this discussion has placed great emphasis on the intrinsic factors involved in service employment, it would be remiss if no attention were paid to the mechanics of how to avoid workers feeling "job dissatisfaction." Probably a fundamental requirement would be to ensure that workers would not sacrifice pension or retirement benefits if they moved between military and civilian employment. They should be guaranteed a retirement benefit at least equal to the one civilian employment would have ensured them and if necessary the benefit should be adjusted to compensate them for military service where such service results in a contracted career span.

A scheme of salary stabilization would be most desirable. By this is meant that if an individual were asked to leave the service because of force reductions, he should be given a reasonable period in which to find a new job and during this period his salary should be continued. If, because of service-connected reasons he is unable to find a job at the level he would be entitled to expect, the military should subsidize his salary for an appropriate time -- probably based on the length of his service. During this period he could simultaneously be provided with retraining which will help in locating a nonmilitary occupation. This could also be augmented by some form of gratuity to

help in the transitional period, say in the form of a cash payment or a low-interest, long-term loan to enable a home to be purchased.

If the guaranteed income plan mentioned earlier were to eventuate this would also greatly assist in such adjustments.

Whilst it has not been specifically mentioned, it is assumed that the actual pay rates offered to the serviceman are reflective of realistic standards because, if this is not so, it would be folly to think the services could attract and retain adequate numbers of career people let alone short-term enlistees.

## C. SENIOR OTHER RANKS

This segment will virtually all be derived from the internal labour supply and, except for a few technical/professional specialties closely allied with civilian skills, the main approach to obtaining short-term manpower resources will be to encourage those entitled to exercise their right of voluntary retirement/separation to postpone that decision. As with the middle-seniority group, reserve forces, civilianization, and bonus payments may be used to some effect. However, one of the unique features in this sector will be a strong concern with retirement plans [O'Gorman, 1972b]. Figure 4 presents a graphical representation of the trade off that exists between military career development and preparation for retirement.

Some suggested steps to give flexibility to the system here are:

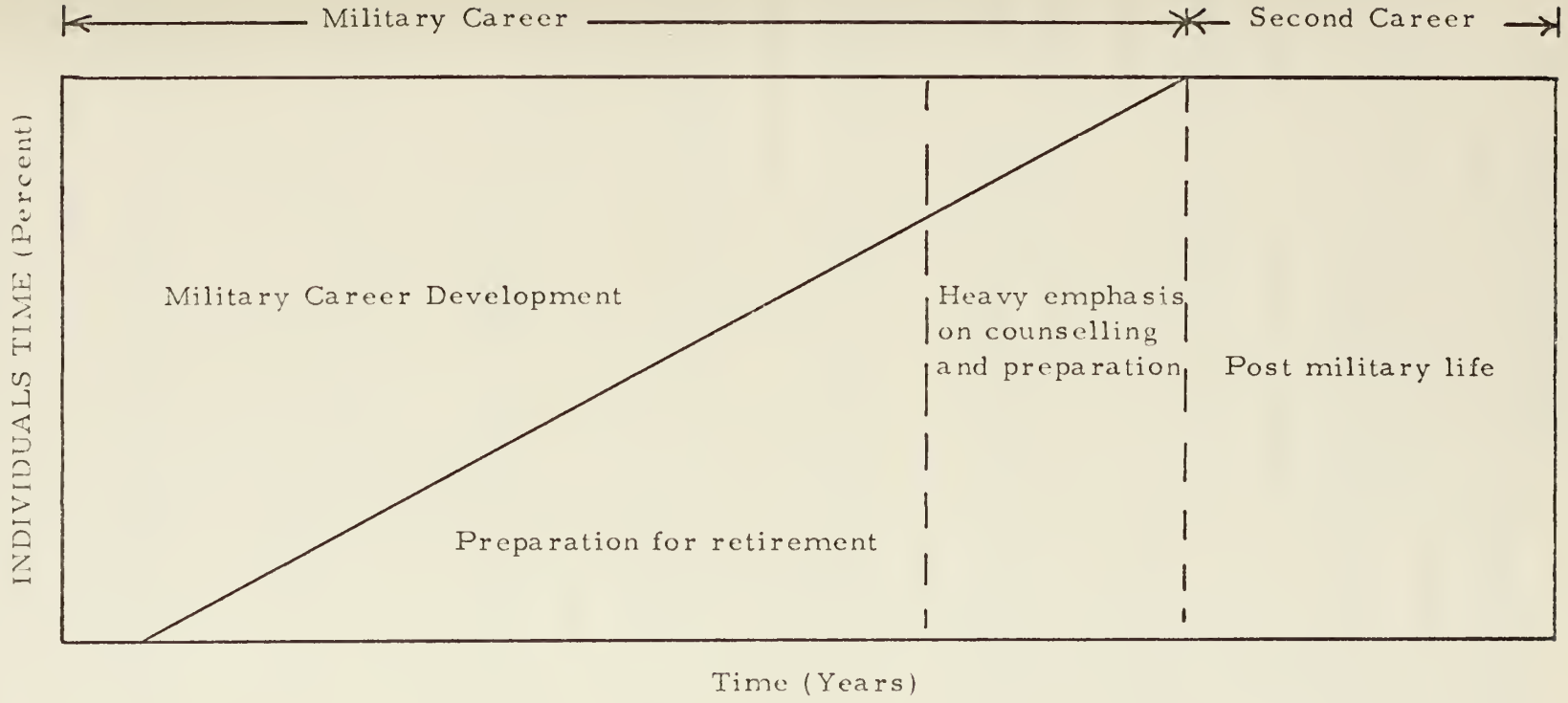


Figure 4. The tradeoff existing between military career development and preparation for retirement.

1. The Retirement Plan

Traditionally military retirement schemes have tended to assume a career span of around 20 years. However, what is required is a scheme which is more responsive to short-term fluctuations. Such a plan would provide benefits for both voluntary (e.g., after 10 years' service) and involuntary separations (say, after five years' service). This means a "vesting" provision would be required in the scheme whereby those personnel who leave the military before becoming eligible for retirement will be entitled to some payment in recognition of their service up to the time of their separation. Those subjected to forced attrition could be given the choice of a lump-sum payment or a smaller, immediate, cash payment together with a pension. Of particular concern in meeting short-term manning requirements in the senior ranks would be an emphasis on the idea that a 30-year career is the norm. This could be encouraged by providing higher benefits for longer service. One method of achieving this is the use of higher retirement multipliers for retirees with over 20 years of service, e.g., 2.5 percent of pay per year of service for up to 20 years of service, and 3 percent for 20 to 30 years of service. For those who elect to serve on beyond 20 years and are subsequently subjected to involuntary retirement before 30 years' service their lump-sum payments and monthly pensions would be increased accordingly over those who leave voluntarily at the 20-years period.

The retirement plan could also be expanded to include a program aimed at giving servicemen the opportunity to receive special

counselling before retirement which would assist them in finding employment elsewhere. This could be allied with a computerized job inventory system designed to match applicants and potential employees. If necessary some form of assistance with retraining could also be provided, and this could extend beyond the actual date of retirement.

2. Temporary Ranks

Use could be made of promoting selected people on a temporary basis to fulfill short-term requirements, on the understanding that the promotion was temporary and after the need had passed substantive rank would be resumed. This would provide experience for those selected and probably (if the requirement were large enough) call for some temporary promotions on a similar basis from the middle to the senior group. This measure requires judicious application to avoid distortion of promotion opportunities for the career force, but, used sparingly, it should be effective.

3. Additional Techniques

The results of experience (Figure 3) suggest that an adequate supply of senior level people would probably exist. However, to forestall shortages, some approaches could be:

a. Force Structure

The structure could allow for a proportion of appointments to be filled by either senior other ranks or junior officers. If a shortage of senior other ranks exists, more of these appointments could be assigned to junior officers.

b. Special Concessions

An undertaking to allow an individual to serve in a selected unit or geographic area could be entered into. This may prompt those who were considering separating to remain for a further limited period.

c. Use of Retirees

Some force positions could be held as open to either retired senior personnel or active members. In times of shortages of active senior personnel a higher percentage of these could be filled by retiring members who because of age restrictions would not be suitable for active duty but who still have the relevant experience and expertise to replace more physically competent personnel, who can then be released for other duties.

## D. JUNIOR OFFICERS

The problems faced in managing the supply of junior officers will be somewhat similar to those encountered in dealing with the junior other ranks. However, because of different socioeconomic backgrounds and expectations [Super and Bohn, 1970] more emphasis will be required on the provision of advanced educational opportunities, self-development opportunities, and the idea that by serving in the military the individual will not put himself at a competitive disadvantage with his peers in the civilian sector. This message will have to be communicated not only to the prospective manpower market but also to parents, school, and community leaders [Salas, 1973].

As previously discussed, strategic and competent, recruiting campaigns are necessary, and the attitudes held by authorities towards the provision of training opportunities may have to be liberalized. As with the junior other ranks the basic strategy should be to maximize the potential supply of recruits and in addition to the techniques previously mentioned the following ideas are suggested.

1. Commercial Arrangements

To facilitate movements of individuals both into and out of the military and to act as a further enlistment incentive arrangements should be made with major commercial organizations and other government departments for people to be guaranteed employment with them once their period of military service is over. This has obvious appeal to the military and for the other departments and organizations it offers them a supply of trained and relatively experienced people who possess certain personal traits which they should find agreeable. If necessary representatives of these organizations could participate in the military selection process and only select people for the scheme who fulfilled both their's and the military's entrance requirements. Individuals enlisting under this scheme should have the option of staying with the service at the end of their initial engagement (say, three years) provided they are acceptable to the military.

2. Subsidized Civilian Training

Whilst frequent use has been made of subsidized civilian training in the medical and dental fields, this approach could be

expanded to include other areas such as business studies and the physical sciences. It could either be made available prior to military service or following it. Probably in the interests of maximizing the potential flow of recruits into the career force and to reap the advantages of the advanced training it would be preferable to offer the tuition prior to service. Such a scheme could be run under the auspices of a total force concept with the individual required to serve a limited period (e.g., one year) on active duty and a further period of years with the reserve component -- the actual time being dependent on the length of the supported training and service needs.

3. Short Term Enlistments

A relatively short period of service (e.g., five years) could be offered on the basis of requiring the individual to serve for the first two years as required by the military and then guaranteeing that in the remaining period he will be assigned to an area where he can undertake such civilian training as he chooses. The only commitment for the Service would be to ensure he can stay in the desired geographic area and to provide some leave from duty to assist with the study program.

4. Direct Entry

Individuals meeting the services' entrance standards could be directly recruited to carry out limited employment duties where specific shortages exist in the junior officer level. These arrangements could be geared to a two year basis wherein the enlistee is given a basic indoctrination course in service life (say six weeks) and is then assigned

to a duty station. At the end of this period if his services are no longer required he would be entitled to a gratuity payment somewhat similar to the combat arms bonuses paid to junior enlisted personnel.

5. Internal Supply

As discussed earlier use could be made of senior other ranks temporarily to fill some junior officer appointments. Additionally suitable members from the middle and senior other ranks could be promoted to increase the supply of junior officers. In times of over supply both normal and forced attrition would have to be relied upon to reduce the size of this latter element and would thus suggest a restricted use of such a technique.

6. Additional Approaches

Other potentially rewarding approaches could be the introduction of more flexibility into the basis surrounding the enlistment obligation. Consideration could be given to the introduction of an "escape clause" which would allow short-term enlistees to exit without prejudice within the first three months of their service. More far reaching innovations could be to offer annual performance bonuses of up to 25 percent of base pay and to assess pay on the actual job performed rather than rank. Provisions such as these would generate questions as to the traditional method of remunerating service personnel, and this aspect will be discussed in the next section.

## E. MIDDLE OFFICERS

From this section comes an essential supply of both military managerial skill and technical expertise. It is similar in some regards to the middle other ranks, but can be distinguished mainly by variations in socioeconomic and expertise patterns. As the theories of Maslow, [1954], Super and Bohn [1970] and Vroom [1964] suggest, and research findings confirm, this group will have probably higher expectations, will relate to different reference groups, and the skills (both military and allied professional/technical) that they possess will require advanced levels of demanding training and relatively long periods of experience before the competence level can be justly claimed. To achieve a degree of short-term responsiveness for manpower demands here, two fundamental strategies are suggested.

### 1. Internal Supply

As many of the required skills are largely derived from training and experience in the junior officer ranks it will be necessary to isolate a potential flow of short-term people rising from within. This process will be somewhat facilitated by the fact that officers, because of variations in method of entry and frequent performance evaluation reporting, can be fairly readily identified as potential career types whose service would be of value to the military in the long term. As previously discussed such identification of individuals is not really feasible with the junior other ranks. This identification process would have to be tied to a selective promotion system wherein automatic advancement to middle

grade rank would not be guaranteed. Those not selected for career prospects would, depending on service needs, be subject to involuntary separation or retirement, offered short-term periods of continued service with no guarantee of tenure beyond, say, four or five years, or be transferred to the Reserve. They could be given an opportunity to specialise in an area where they could develop such expertise that their eventual value in the civilian sector would be enhanced. This option would desirably be associated with allied civilian training.

For the scheme to be effective the conditions of service and the various aspects of job content discussed in the earlier sections would have to be such that individuals and their families would find these alternatives attractive and no adverse effects on annual procurement would emerge as potential enlistees perceived a diminution of the value of a service career. In fact, such a system should act as a career incentive by allowing performance to be more clearly rewarded and so help fulfill the need for achievement likely to be found amongst this group [Salas, 1973; Culclasure, 1971].

2. External Supply

As the military now has a continuing demand for technical/professional skills which are essentially common with those found in the civilian sector it will be possible to recruit from the external labour supply to meet short-term needs in these areas. Many of the people required will have a professional or technical body as their reference group and will look to the service to provide them with a source of income

or an opportunity to obtain further professional experience. They will view the service differently to the career military types whose sense of commitment is to that organization. For ease of discussion this segment will be called "noncareer" but this does not deny the fact they are pursuing their own professional/technical career and they look upon military service as one aspect of that career. To highlight the variations between the career and the noncareer types it is useful to observe the work of Kaplan [1962] who used seven criteria to differentiate between them.

| | Characteristic | Career | Noncareer |
|---|---|---|---|
| 1. | Security Consciousness | Greater Consciousness | More of a risk taker. Greater confidence about civilian employment. |
| 2. | Independence of action | Either lacks desire for independent action or shows ability to formulate independent action within the military | Feels constrained by military life style, greater desire for independence of action. |
| 3. | Confidence in occupational self-sufficiency | Less confident about civilian expectations, more confident about expectations within the service. | Greater expectations with civilian employment. |
| 4. | Military and civilian status symbols | Highly valued | Little value in reacting to status symbols |
| 5. | Desire for individual recognition of effort | Low. Group recognition more important | High |

(continuation of table)

| | (Characteristic) | (Career) | (Noncareer) |
|---|---|---|---|
| 6. | Own supervisory ability | Confident of own ability especially in large groups | Not as confident, more confident with small groups |
| 7. | Acceptance of authority | Do not perceive service regulations as hampering initiative. Willing to accept any assignment | See regulations as a limitation on actions. Object to assignment under adverse conditions. |

This comparison does in some ways seem a little superficial as it concentrates more on the immediate job environment rather than the overall feeling of self-fulfillment an individual may be experiencing. It neglects such important issues as the immediate family's attitudes and the individual's feeling of the relevance of the military profession. However, it has merit in that it highlights some essential differences in attitude between the career and noncareer types. As previously mentioned it would seem that the career person finds the military way of life agreeable albeit for a variety of reasons, whereas the noncareer type does not. However, for his own reasons the noncareer person may find it acceptable to serve in the organization for a limited time.

Braunstein [1974] in studying the attitudes of noncareer physicians found that they complained of a lack of job satisfaction, had a dislike of the job context, and really only enlisted (excluding draft motivations) to take advantage of an opportunity to receive income

whilst contemplating their future and also to obtain the advantages of the available educational and training facilities. Research by Broedling [1974] on the presence of "internals" (i.e., people who see themselves as acting on the world) and "externals" (i.e., people who see the world acting on them) in the Navy found that according to her sample results Navy people were generally more internal than the population and certainly more so than college students in particular. Broedling's Navy sample consisted primarily of career people, and her results tended to support Kaplan's view that some people can accept and learn to live within the military system and simultaneously feel an exercise of personal initiative and influence. Broedling suggests that those who cannot usually leave after one tour of duty. For the career people it is also interesting to note Broedling's observation that the service concepts of a clear chain of command, accountability, and responsibility actually stimulate in those individuals a greater sense of personal growth and satisfaction than they might feel in a more loosely structured situation.

Using these strategies as a framework it is proposed to discuss some steps that could be taken to enhance the supply of short term individuals both from within and outside the force.

3. Short Term Incentives and Techniques

In addition to a selective promotion system use could be made of some of the other techniques previously discussed to give the needed flexibility to the internal supply of manpower for primarily military oriented positions -- e.g., sabbatical leave periods, reserve forces,

dual civil/military positions, critical skill bonuses, selection of a geographic area of service, and so on. However, the success of these assumes that a sufficiently attractive job context and content environment exists. Beyond those points mentioned earlier in this regard, consideration needs to be given to two further aspects.

a. Voluntary Termination

There is a tendency to project some hostility towards the perceived career type who, for personal reasons, voluntarily decides to exit. Then, if at a later time, he should apply for reentry he is treated somewhat like the recalcitrant child in need of punishment. Obviously the rights of those who stayed in the employ of the military must be given equitable safeguards but it should not be treated as an unusual or threatening act for someone to try his fortune elsewhere for a time. In fact there is a lot to be said for allowing employees to graze in other pastures if they so desire. For some it will be a chastening experience as they realize they have less potential than they had anticipated, and for others it will strengthen their conviction that the military way of life suits them best. A more understanding attitude here may assist in making career people consider voluntary separation at a time when it would be in the interests of the service for them to do so.

b. Decentralization

As revealed by the surveys quoted earlier, one of the persistent criticisms of the military organization is the feeling of a lack of opportunity to exercise independent action. This feeling is probably

best described by the saying of having to "do things by the book." Whilst many career people would not agree, a number apparently do, and the evidence suggests that the majority of noncareer individuals apparently perceive this as a major disadvantage to service employment. Understandably, a complex structure such as the military must have a number of instructions guiding members in their duties, but there does seem to be a tendency for these instructions to be overly restrictive and in many instances it is not so much the instructions per se that are at fault but rather their implementation. Senior officials can become unduly anxious about deviations from their interpretation of policy guidelines and either refuse to delegate responsibility to others or insist on exercising the most critical supervision of their subordinates. The system is also being driven to centralization because of the use of complex data processing equipment and the advent of highly sophisticated communications systems which elevate virtually all the nonroutine decision making to the higher levels of command. The incompatibility of these developments with current social and personal values is obvious and steps designed to reverse this trend should be encouraged. Commanders should be trained to become more skillful in the art of delegation and they should be encouraged to see their role as more that of a tutor than critic. Within reason they must be prepared to give their subordinates "a chance to fail."

Ironically the group who can suffer most from being over-supervised are the middle managers. As junior leaders they were given a fair degree of independence because the tasks they were assigned had relatively short-term impacts and so their superiors were willing to let them experiment. However, further up the ladder the tasks have a longer gestation period and failures of this stage are seen as having potentially more serious repercussions. Thus, the tendency is to centralize decision making to a greater extent and to weaken the official's power of independent action. The net result is doubly to frustrate the person who feels he has by now acquired the necessary skills and experience successfully to solve the problems given to him, or to know when they are beyond him, and yet he is not allowed to test himself. A greater trust of subordinates is needed (less Theory X) and this should be coupled with rewards for those who succeed and equitable losses for those who do not. It should also be appreciated that it is at the middle-management level (both officer and other rank) that a form of plateauing in the services' demand for expertise occurs as the middle of the structural pyramid is reached. More job discretion here would thus permit an additional ongoing process of selection to assist in identifying those for promotion, retention or separation.

4. Noncareer Attractions

In attempting to manipulate the supply of technical/professional people the manpower planner will find it reasonably easy to reduce this supply, but, faced with the problem of increasing it, he may find that

task more difficult. The foregoing discussions indicate extrinsic factors will be of importance and it is suggested that the concepts of rank and pay merit consideration here.

Whilst surveys have shown that a clear rank structure is supported by career members of the force, it has been suggested that for short-term people it can be a source of irritation [Braunstein, 1974]. It can also be argued that having to place noncareer people in certain rank categories is at variance with the logic of the military pay system. Traditionally, and probably for career people it still applies, individuals are felt to be best remunerated on the pure pay method of time spent. This is necessary to allow for the exigencies of the service and still seems to be valid. However, for short-term, noncareer people the intention is to hire them to fill a given need in the organization, -- virtually to do a specific job, -- and therefore they should be paid based on that job. Under these conditions it would seem that they should obtain their "rank" from the particular job they hold and, to avoid conflicting with the career force, it is suggested that consideration be given here to an ostensibly rankless, noncareer force who derive their status from the particular job they hold at any one time. This arrangement would also provide increased flexibility in employing noncareer people as they could be more easily deployed into areas where their skills seemed most appropriate at any one time, as well as giving them an increased opportunity to remain longer in a geographic area by job transfer if they so desired. It is not suggested this is the panacea for stimulating short-

term recruiting but coupled with realistic fringe benefits and job conditions it could greatly help in stimulating both the recruitment and scope for employment of noncareer people.

## F. SENIOR OFFICERS

The management of this group requires acceptance of the belief that it is essential some flexibility be allowed in the relationship between legal grade limitations and the actual number of officers required in each grade to support the particular force structure existing at any one time. This is mainly a function of the fact manpower demands are constantly changing and requirements cannot be projected far enough into the future to be entirely successful in shaping the career force for the long term.

Whilst officers are procured and progress through the system in anticipation of their future employment it takes in the order of two decades to develop an effective, professional, senior-level officer and, as previously discussed, the bulk of the services' senior officers must be obtained from internal sources. During this developmental period changes in organization, technology, and administration will stimulate unpredictable variations in the demand for officers and the force structure. In attempting to accommodate this problem the suggested basic philosophy is to provide for a nonlinear relationship between total officer strength and the requirement for senior officers. That is, as the total officer strength increases the proportion of senior officers to the total officer strength decreases and, similarly, as the total officer strength decreases

the proportion of senior officers increases. This principle assumes that the basic organization of the military does not vary in direct proportion to total officer strength and suggests a realistic compromise between the needs of efficiency and career opportunity.

Whilst unlikely, if the pool of service officers created by this principle should be found to be inadequate for short-term needs, it can be supplemented by the use of techniques such as temporary extensions of service beyond retirement date and more rapid promotions of officers from the top echelons of the middle group. Alternatively, an over supply can be reduced by invoking early retirement provisions in the retirement scheme.

It is also worthwhile to remember officers in this group will usually be characterised by a strong commitment to service life and provided their essential financial security is provided for, they will generally be very willing to cooperate to meet the needs of the organization.

## IV. CONCLUSION

This discussion has sought to suggest ways in which short term demands for manpower by military organizations can be satisfied. The emphasis has been on the use of noncareer people who can be thought of as being willing to serve provided they are supplied with reasonable levels of job satisfaction and financial reward.

Probably the essential point to remember is that their willingness to serve will be based more on mutual aid arrangements than the career individuals who find in the military per se a sense of satisfaction. Thus the incentives needed to attract the short-term individual must have a slightly different bias to those aimed at the career person. For the noncareer individual he must feel he has nothing to lose by going into the service but a lot to gain.

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